

Hazard Communications: OSHA Standard 1910.1200¹

William J. Becker and William C. Stephenson²

This is a condensation of Standard 1910.1200 of the Occupational Safety and Health Act. The purpose of this standard is to ensure that:

- the hazards of all chemicals produced or imported are evaluated, and
- Information concerning their hazards is transmitted to employers and employees.

This transmittal of information is to be accomplished by means of comprehensive hazard communication programs, which are to include:

- container labeling and other forms of warning,
- material safety data sheets (MSDSs), and
- employee training.

This document is not intended to be totally inclusive but rather to highlight the information and requirements in the complete OSHA standard that owners and managers of agricultural businesses should understand.

PREEMINENCE

This occupational safety and health standard is intended to preempt any state or local legal requirements pertaining to the subject. No state or political subdivision of a state may adopt or enforce, through any court or agency, any requirement relating to the issue addressed by this Federal standard, except through a Federally-approved state plan.

APPLICATION

All employers are required to provide information to their employees about the hazardous chemicals to which they are exposed, by means of:

- a hazard communication program,
- labels and other forms of warning,
- material safety data sheets (MSDSs), and
- information and training.

Distributors are required to transmit the required information to employers.

This standard applies to any chemical known to be present in the workplace and to which employees may be exposed under normal conditions of use or in a foreseeable emergency.

In work operations where employees only handle chemicals in sealed containers which are not opened under normal conditions of use (such as are found in marine cargo handling, warehousing, or retail sales), this section applies only as follows:

- Employers must ensure that labels on incoming containers of hazardous chemicals are not removed or defaced.
- Employers must:

1. This document, Fact Sheet AE-131, was published November 1992 by the Florida Cooperative Extension Service. For more information, contact your county Cooperative Extension Service office.

2. Professor, Agricultural Engineering, and Extension Safety Specialist; Graduate Assistant and Technical Writer, FAIRS, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville.

- maintain copies of any MSDSs that are received with incoming shipments of the sealed containers of hazardous chemicals,
 - obtain an MSDS for sealed containers of hazardous chemicals received without an MSDS if an employee requests the MSDS, and
 - ensure that the MSDSs are readily accessible during each work shift to employees when they are in their work area(s).
- Employers must ensure that employees are provided with information and training required by this standard.

This standard does not require labeling of any pesticide, as such term is defined in the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 et seq.), when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Environmental Protection Agency.

Author's Comment: Further, any products controlled by the Federal Food, Drug and Cosmetic Act, by the Federal Alcohol Administration Act, by the Consumer Product Safety Act or by the Federal Hazardous Substances Act are not subject to the requirements of the OSHA Hazard Communication Standard. In addition, the Hazard Communication Standard does not cover hazardous wastes, tobacco or tobacco products, wood or wood products, or manufactured articles which do not result in exposure to hazardous chemicals.

DEFINITIONS

Chemical name means the scientific designation of a chemical in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC) or the Chemical Abstracts Service (CAS) rules of nomenclature, or a name which will clearly identify the chemical for the purpose of conducting a hazard evaluation.

Common name means any designation or identification such as code name, code number, trade name, brand name or generic name used to identify a chemical other than by its chemical name.

Compressed gas means:

- a gas or mixture of gases having, in a container, an absolute pressure exceeding 40 psi at 70 deg. F (21.1 deg. C), or
- a gas or mixture of gases having, in a container, an absolute pressure exceeding 104 psi at 130 deg. F (54.4 deg. C) regardless of the pressure at 70 deg. F (21.1 deg. C), or
- a liquid having a vapor pressure exceeding 40 psi at 100 deg. F (37.8 deg. C) as determined by ASTM D-323-72.

Designated representative means any individual or organization to whom an employee gives written authorization to exercise such employee's rights under this section. A recognized or certified collective bargaining agent must be treated automatically as a designated representative without regard to written employee authorization.

Employee means a worker who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies. Workers such as office workers or bank tellers who encounter hazardous chemicals only in non-routine, isolated instances are not covered.

Employer means a person engaged in a business where chemicals are either used, distributed, or are produced for use or distribution, including a contractor or subcontractor.

Exposure or **exposed** means that an employee is subjected to a hazardous chemical in the course of employment through any route of entry (inhalation, ingestion, skin contact or absorption, etc.), and includes potential (e.g., accidental or possible) exposure.

Foreseeable emergency means any potential occurrence, such as, but not limited to, equipment failure, rupture of containers or failure of control equipment which could result in an uncontrolled release of a hazardous chemical into the workplace.

Hazardous chemical means any chemical which is a physical hazard or a health hazard.

Hazard warning means any words, pictures, symbols or combination thereof appearing on a label or other appropriate form of warning which convey the hazard(s) of the chemical(s) in the container(s).

Health hazard means a chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees. The term "health hazard" includes chemicals which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic system, and agents which damage the lungs, skin, eyes or mucous membranes.

Identity means any chemical or common name which is indicated on the material safety data sheet (MSDS) for the chemical. The identity used must permit cross-references to be made among the required list of hazardous chemicals, the label and the MSDS.

Immediate use means that the hazardous chemical will be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred.

Label means any written, printed or graphic material, displayed on or affixed to containers of hazardous chemicals.

Material safety data sheet (MSDS) means written or printed material concerning a hazardous chemical which is prepared in accordance with this standard.

Mixture means any combination of two or more chemicals if the combination is not, in whole or in part, the result of a chemical reaction.

Physical hazard means a chemical for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive) or water-reactive.

Produce means to manufacture, process, formulate or repack.

Responsible party means someone who can provide additional information on the hazardous chemical and appropriate emergency procedures, if necessary.

Specific chemical identity means the chemical name, Chemical Abstracts Service (CAS) Registry Number or any other information that reveals the precise chemical designation of the substance.

Work area means a room or defined space in a workplace where hazardous chemicals are produced or used, and where employees are present.

Workplace means an establishment, job site or project, at one geographical location containing one or more work areas.

REQUIREMENTS

Written Hazard Communication Program

Employers must develop, implement and maintain at the workplace a written hazard communication program which at least describes how the requirements specified in this standard will be met, and which also includes the following:

- a list or inventory of the hazardous chemicals known to be present, using an identity that is referenced on the appropriate material safety data sheet (MSDS) (the list may be compiled for the workplace as a whole or for individual work areas), and
- the methods the employer will use to inform employees of the hazards of non-routine tasks (for example, the cleaning of a bulk tank) and the hazards associated with chemicals contained in unlabeled pipes in their work areas.

Multi-Employer Workplaces. Employers who produce, use or store hazardous chemicals at a workplace in such a way that the employees of other employer(s) may be exposed (for example, employees of a contractor working on-site) must additionally ensure that the hazard communication programs include the following:

- the methods the employer will use to provide the other employer(s) with a copy of the MSDS--or to make it available at a central location in the workplace--for each hazardous chemical the other employer(s)' employees may be exposed to while working,
- the methods the employer will use to inform the other employer(s) of any precautionary measures that need to be taken to protect employees during the workplace's normal operating conditions and in foreseeable emergencies, and
- the methods the employer will use to inform the other employer(s) of the labeling system used in the workplace.

The employer may rely on an existing hazard communication program to comply with these requirements, provided that it meets the criteria established in this standard.

The employer must make the written hazard communication program available, upon request, to employees, their designated representatives, and to OSHA.

Aside from the exceptions noted in the section Labels and Other Forms of Warning, the employer must ensure that each container of hazardous chemicals in the workplace is labeled, tagged or marked with:

- the identity of the hazardous chemical(s) contained therein, and
- appropriate hazard warnings.

Labels and Other Forms of Warning

The employer may use signs, placards, process sheets, batch tickets, operating procedures or other such written materials in lieu of affixing labels to individual stationary process containers, as long as the alternative method identifies the containers to which it is applicable and conveys the required information. The written materials must be readily accessible to the employees in their work area throughout each work shift.

The employer is not required to label portable containers into which hazardous chemicals are transferred from labeled containers, and which are intended only for the immediate use of the employee who performs the transfer.

The employer must not remove or deface existing labels on incoming containers of hazardous chemicals, unless the container is immediately marked with the required information.

The employer must ensure that labels or other forms of warning are legible, in English, and prominently displayed on the container, or readily available in the work area throughout each work shift. Employers having employees who speak other languages may add the information in their language to the material presented, as long as the information is presented in English as well.

Material Safety Data Sheet (MSDS)

Chemical suppliers must ensure that distributors and employers are provided an appropriate MSDS with their

initial shipment and with the first shipment after a MSDS is updated. The chemical suppliers must either provide MSDSs with the shipped containers or send them to the employer prior to or at the time of the shipment. If the MSDS is not provided with a shipment that has been labeled as a hazardous chemical, the purchaser must obtain one from the chemical supplier as soon as possible.

The employer must:

- maintain copies of the required MSDSs for each hazardous chemical in the workplace, and
- ensure that they are readily accessible during each work shift to employees when they are in their work area(s).

Where employees must travel between workplaces during a workshift (i.e., their work is carried out at more than one geographical location) MSDSs may be kept at a central location at the primary workplace facility. In this situation, the employer must ensure that employees can immediately obtain the required information in an emergency. [However, it is recommended that employees carry MSDSs with them to their worksite.]

MSDSs may be kept in any form, including operating procedures, and may be designed to cover groups of hazardous chemicals in a work area where addressing the hazards of a process--rather than individual hazardous chemicals--would be more appropriate. However, the employer must ensure that in all cases the required information is provided for each hazardous chemical and is readily accessible during each work shift to employees when they are in their work area(s).

MSDSs must also be made readily available, upon request, to designated representatives and to OSHA.

Employee Information and Training

Employers must provide employees with information and training on hazardous chemicals in their work area at the time of their initial assignment, whenever a new hazard is introduced into their work area and annually thereafter.

Information

Employees must be informed of:

- the requirements of this standard,
- any operations in their work area where hazardous chemicals are present, and
- the location and availability of the written hazard communication program, including the required list(s) or inventory of hazardous chemicals, and material safety data sheets (MSDSs) required by this standard.

Training

Employee training must include at least:

- methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area, such as:
 - monitoring conducted by the employer,
 - continuous monitoring devices,
 - visual appearance or odor of hazardous chemicals when being released, etc.;
- the physical and health hazards of the chemicals in the work area;
- the measures employees can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used; and
- the details of the hazard communication program developed by the employer, including an explanation of the labeling system and the material safety data sheet (MSDS), and how employees can obtain and use the appropriate hazard information.

Employees must be trained on the safe use of each chemical they use or to which they could be exposed. This can best be done by using the MSDS provided, and should include:

- the chemical and common name(s) of all ingredients which have been determined to present a physical hazard when present in the mixture,

- physical and chemical characteristics of the hazardous chemical (such as vapor pressure and flash point),
- the physical hazards of the hazardous chemical, including the potential for fire, explosion and reactivity,
- the health hazards of the hazardous chemical, including signs and symptoms of exposure, and any medical conditions which are generally recognized as being aggravated by exposure to the chemical,
- the primary route(s) of entry,
- the OSHA permissible exposure limit and any other exposure limit used or recommended on the material safety data sheet, where available,
- whether the hazardous chemical is listed as a potential carcinogen,
- any generally applicable precautions for safe handling and use which are known and provided on the material safety data sheet, including appropriate hygienic practices, protective measures during repair and maintenance of contaminated equipment, and procedures for clean-up of spills and leaks,
- any generally applicable control measures which are known and provided on the material safety data sheet, such as appropriate engineering controls, work practices or personal protective equipment,
- emergency and first aid procedures,
- the date of preparation of the material safety data sheet or the last change to it, and
- the name, address and telephone number of the chemical manufacturer or other responsible party preparing or distributing the material safety data sheet, who can provide additional information on the hazardous chemical and appropriate emergency procedures, if necessary.